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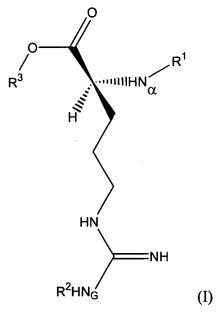
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## **CLAIM LISTING**

The listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Previously Presented)

A compound of the formula (I):



wherein  $R^1$  is a protecting group for  $N\alpha$ ;

R<sup>2</sup> is a protecting group for N<sub>G</sub>; and

R<sup>3</sup> is selected from the group consisting of 1-naphthyl and derivatives thereof; phenylpyrrole and derivatives thereof, phenylthiophene and derivatives thereof, indole and derivatives thereof, and 2-phenyl-5H-thiazol and derivatives thereof; and wherein the compound of formula (I) is a trypsin substrate such that trypsin cleaves the O-C single bond, which liberates R<sup>3</sup>-OH.

- 2. (Original) The compound of claim 1 wherein R<sup>1</sup> is selected from the group consisting of acyl, arene sulfonyl, and carbamoyl derivatives.
- 3. (Original) The compound of claim 1 wherein R<sup>1</sup> is selected from the group consisting of t-butyloxycarbonyl and derivatives, benzyloxycarbonyl and derivatives, benzoyl and derivatives, and benzene sulfonyl and derivatives.

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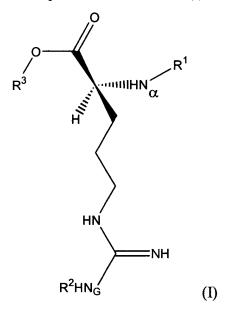
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- 4. (Original) The compound of claim 1 wherein R<sup>2</sup> is selected from the group consisting of nitro, arene sulfonyl, carbamoyl, and acyl.
- 5. (Original) The compound of claim 1 wherein R<sup>2</sup> is selected from the group consisting of nitro, benzene sulfonyl and derivatives, tosyl, carbobenzyloxy and derivatives, and benzoyl and derivatives.

## Claims 6-10 (cancelled)

- 11. (Original) The compound of claim 1 wherein R<sup>3</sup>-OH is optically distinct from the compound of formula (I).
- 12. (Withdrawn) A diagnostic device comprising:a carrier matrix; anda compound of the formula (I)



wherein  $R^1$  is a protecting group for  $N\alpha$ ;

R<sup>2</sup> is a protecting group for N<sub>G</sub>; and

R<sup>3</sup> is aryl; and

wherein the compound of formula (I) is a trypsin substrate such that trypsin cleaves the O-C single bond, which liberates R<sup>3</sup>-OH.

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- 13. (Withdrawn) The diagnostic device of claim 12 wherein R<sup>1</sup> is selected from the group consisting of acyl, arene sulfonyl, and carbamoyl derivatives.
- 14. (Withdrawn) The diagnostic device of claim 12 wherein R<sup>1</sup> is selected from the group consisting of t-butyloxycarbonyl and derivatives, benzyloxycarbonyl and derivatives, benzyl and derivatives, and benzene sulfonyl and derivatives.
- 15. (Withdrawn) The diagnostic device of claim 12 wherein R<sup>2</sup> is selected from the group consisting of nitro, arene sulfonyl, carbamoyl, and acyl.
- 16. (Withdrawn) The diagnostic device of claim 12 wherein R<sup>2</sup> is selected from the group consisting of nitro, benzene sulfonyl and derivatives, tosyl, carbobenzyloxy and derivatives, and benzoyl and derivatives.
- 17. (Withdrawn) The diagnostic device of claim 12 wherein R<sup>3</sup> comprises a heterocyclic aromatic moiety.
- 18. (Withdrawn) The diagnostic device of claim 17 wherein R<sup>3</sup> is a fused ring system.
- 19. (Withdrawn) The diagnostic device of claim 12 wherein R<sup>3</sup> is carbocyclic.
- 20. (Withdrawn) The diagnostic device of claim 19 wherein R<sup>3</sup> is 1-naththol and derivatives thereof.
- 21. (Withdrawn) The diagnostic device of claim 12 wherein R<sup>3</sup> is selected from the group consisting of phenylpyrrole and derivatives thereof, coumarin and derivatives thereof, phenylthiophene and derivatives thereof, indole and derivatives thereof, and 2-phenyl-5H-thiazol and derivatives thereof.
- 22. (Withdrawn) The diagnostic device of claim 12 wherein the carrier matrix is filter paper.
- 23. (Withdrawn) The diagnostic device of claim 12 wherein the carrier matrix contains a diazonium salt.
- 24. (Withdrawn) The diagnostic device of claim 23 wherein R<sup>3</sup>-OH reacts with a diazonium salt to form a visible color.

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25. (Withdrawn) The diagnostic device of claim 23 wherein the diazonium salt has the structure:

 $R^4-N_2^+An^-$ 

wherein R<sup>4</sup> is aryl; and

wherein An is an anion.

- 26. (Withdrawn) The diagnostic device of claim 25 wherein R<sup>4</sup> is morpholinobenzene and derivatives thereof.
- 27. (Withdrawn) The diagnostic device of claim 23 wherein the diazonium salt is a zwitter ion having the structure

$$G$$
 $N_2^{\dagger}$ 
 $D$ 

wherein D is an anion;

wherein G is independently H, C<sub>1-6</sub> alkyl, or in which the two G moieties together form a fused ring system; and

wherein B is H or OH.

28. (Withdrawn) The diagnostic device of claim 12 wherein R<sup>3</sup>-OH is optically distinct from the compound of formula (I).

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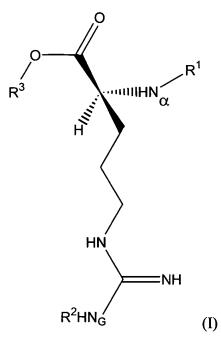
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29. (Withdrawn) A method of preparing a diagnostic device, the device comprising a carrier matrix and a trypsin substrate of formula (I)



wherein  $R^1$  is a protecting group for  $N\alpha$ ;

 $R^2$  is a protecting group for  $N_G$ ; and

R<sup>3</sup> is aryl; and

wherein the compound of formula (I) is a trypsin substrate such that trypsin cleaves the O-C single bond, which liberates R<sup>3</sup>-OH;

the method comprising:

- (a) contacting a carrier matrix with a buffer solution;
- (b) drying the carrier matrix; and
- (c) contacting the carrier matrix with a solution comprising the trypsin substrate of formula (I).
- 30. (Withdrawn) The method of claim 29 further comprising (d) drying the carrier matrix.
- 31. (Withdrawn) The method of claim 29 wherein the carrier matrix is filter paper.
- 32. (Withdrawn) The method of claim 29 wherein the carrier matrix comprises a diazonium salt.

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- 33. (Withdrawn) The method of claim 32 wherein R<sup>3</sup>-OH reacts with the diazonium salt to form a visible color.
- 34. (Withdrawn) The method of claim 25 wherein the solution comprising the trypsin substrate of formula (I) further comprises a diazonium salt.
- 35. (Withdrawn) The method of claim 29 wherein R<sup>3</sup>-OH reacts with the diazonium salt to form a visible color.
- 36. (Withdrawn) The method of claim 29 wherein R<sup>3</sup>-OH is optically distinct from the compound of formula (I).

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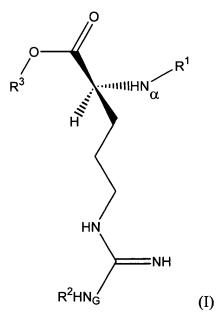
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37. (Withdrawn) A method for detecting levels of urinary trypsin inhibitor in a biological sample comprising:

contacting a biological sample with a predetermined amount of trypsin, a predetermined amount of a diazonium salt, and a diagnostic device comprising a trypsin substrate of the formula (I)



wherein  $R^1$  is a protecting group for  $N\alpha$ ;

R<sup>2</sup> is a protecting group for N<sub>G</sub>; and

R<sup>3</sup> is aryl; and

wherein the compound of formula (I) is a trypsin substrate such that trypsin cleaves the O-C single bond, which liberates R<sup>3</sup>-OH; and

wherein the compound R<sup>3</sup>-OH reacts with a diazonium salt to form a visible color such that the greater the intensity of the color, the less urinary trypsin inhibitor is in the biological sample.

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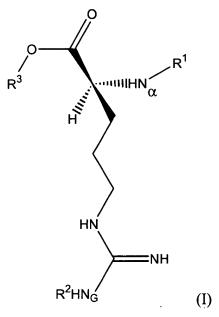
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- 38. (Withdrawn) A diagnostic kit for determining the presence of urinary trypsin inhibitor in a biological fluid, the kit comprising:
  - (a) trypsin; and
  - (b) a trypsin substrate of the formula (I)



wherein  $\boldsymbol{R}^{1}$  is a protecting group for  $N\alpha;$ 

R<sup>2</sup> is a protecting group for N<sub>G</sub>; and

R<sup>3</sup> is aryl; and

wherein the compound of formula (I) is a trypsin substrate such that trypsin cleaves the O-C single bond, which liberates R<sup>3</sup>-OH.

- 39. (Withdrawn) The diagnostic kit of claim 38 wherein R<sup>3</sup>-OH is optically distinct from the trypsin substrate.
- 40. (Withdrawn) The diagnostic kit of claim 38 wherein further comprising: (c) at least one reagent capable of being used to determine the presence of urinary trypsin inhibitor.
- 41. (Withdrawn) The diagnostic kit of claim 40 wherein the reagent is a diazonium salt.

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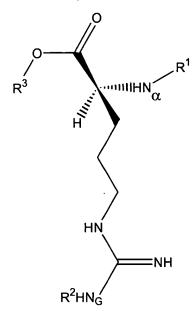
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## 42. (Previously Presented)

A compound of the formula (I):



wherein  $R^1$  is a protecting group for  $N\alpha$ ;

 $R^2$  is a protecting group for  $N_G$ ; and

R<sup>3</sup> is aryl;

wherein the compound of formula (I) is a trypsin substrate such that trypsin cleaves the O-C single bond, which liberates  $R^3-OH$ ; and

wherein  $R^1$  is arene sulfonyl or a derivative thereof;  $R^2$  is nitro; and  $R^3$  is phenylpyrrole or a derivative thereof.

43. (Previously presented)

The compound of claim 42 wherein  $R^1$  is p-toluenesulfonyl

(tosyl).

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## 44. (Previously presented)

The compound of claim 42 wherein the compound

has the formula: